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(54) Title: A PROCESS FOR THE PRODUCTION OF LINEAR LOW-DENSITY POLYETHYLENE COMPOSITION

(57) **Abstract:** The present invention concerns a process for producing bimodal linear low-density polyethylene polymer compositions, useful for making films. The polymer compositions have a melt flow rate  $MI_{R2}$  of 0.4 to 1.0 g/10 min and a density of 918 to 925 kg/m<sup>3</sup>. The process to produce the polymer compositions involves copolymerising ethylene with an alpha-olefin comonomer in a loop reactor to produce a low molecular weight polymer having a melt flow rate  $MI_{R2}$  of 50 to 500 g/10 min and a density of 945 to 953 kg/m<sup>3</sup>. The polymerisation is continued in a gas phase reactor to produce a high molecular weight polymer such, that the final polymer composition has the desired properties. The final composition contains from 41 to 48 % by weight of the low molecular weight polymer and from 59 to 52 % by weight of the high molecular weight polymer. The resulting films have an excellent visual appearance and good mechanical properties. The compositions can easily be converted to films. The process can be operated a long time without a shutdown.

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